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ENGLISH OF LEATHER MAKING

LESSONS FOR ADULT ENGLISH CLASSES

COMPILED BY

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AND

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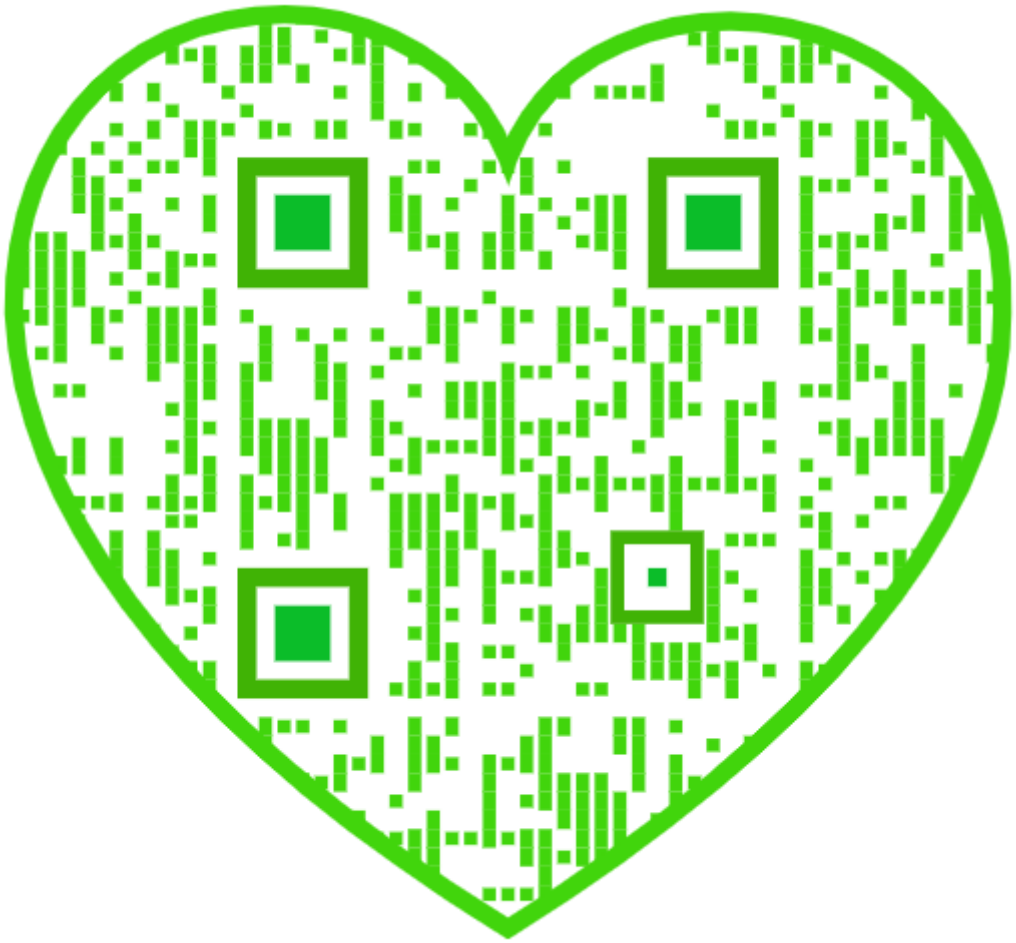
ISSUED BY
INDUSTRIAL SERVICE DEPARTMENT
ASSOCIATED INDUSTRIES OF MASSACHUSETTS
1031 KIMBALL BUILDING
BOSTON MASS

PRICE 75 CENTS



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T.P.B. May 27-20

FOREWORD

This series of lessons in "The English of Leather Making" has a two-fold purpose:

1. To meet the need for special lessons showing the processes in making leather and giving enough technical vocabulary so that the pupils may understand work instructions and safety precautions.

2. To teach each worker enough about every step in the process of manufacture, from raw materials to finished article, so that he will have a thorough understanding of the relation of his job to the work of the plant as a whole.

These lessons cover hide and sheep-skin tanning. They were compiled by George F. Quimby, Industrial Service Secretary of the Associated Industries of Massachusetts and Charles H. Paull, of the Bureau of Vocational Guidance at Harvard University, with the constant aid and generous co-operation of executives, foremen and other employees of the A. C. Lawrence Leather Company of Peabody, Massachusetts.

That Company unhesitatingly opened its plant for the work and furnished not only every possible assistance but also provided the photographs from which the cuts for the lessons were made.

Each lesson has been carefully reviewed by those familiar with tanning and by the teachers who have charge of instruction in English classes of adult aliens at the A. C. Lawrence plant.

We hope these lessons will be found practical, both as to technical material and as to requirements for English Classes.

Undoubtedly the need for improvements will develop as the lessons are used. We earnestly solicit suggestions for improvements which can be made in future issues.

INDUSTRIAL SERVICE DEPARTMENT
Associated Industries of Massachusetts
1034 Kimball Building
BOSTON, MASSACHUSETTS
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LESSON 1

UNLOADING HIDES FROM A FREIGHT CAR

OPENING BUNDLES AND TRIMMING

UNLOADING AND OPENING

1. work	I work in a tannery.
2. make	A tannery is a factory where we make leather.
3. make	We make leather from hides and skins.
4. come	Hides come from cows and steers.
5. come	Skins come from sheep, goats and pigs.
6. get	Tanneries get hides and skins from the United States.
7. get	Tanneries get hides and skins from many other countries.
8. call—come	We call hides and skins raw stock when they come to the tannery.
9. is—will will not spoil	Raw stock is greensalted, dried or pickled. It will not spoil.
10. come	The hides come to the tannery.
11. unload	I unload them from the freight car.
12. open	My partners open the bundles of raw stock.
13. cut off will make	They cut off the parts that will not make leather.
14. are	Some of these parts are the ears and tail.
15. call	I call this trimming.
16. do know lived	Do you know what hides and skins come from the country where you lived?

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LESSON 2

PINWHEEL

SOAKING AND WASHING

1.	unload	I unload hides from the freight car.
2.	have	They have salt and dirt on them.
3.	must clean off	I must clean off the dirt and salt.
4.	put — to soak	I put the hides into vats of water to soak them.
5.	are	The vats are below the floor.
6.	takes out	The water takes out most of the salt and dirt.
7.	pull	Then my partner and I pull the hides from the vat with tongs.
8.	put — to wash	My partner and I put the hides into the pinwheel to wash them.
9.	push	I push the shipper.
10.	turns	The pinwheel turns.
11.	are clean pull back	When the hides are clean, I pull back the shipper.
12.	must lock	I must lock the shipper.
13.	stops	The pinwheel stops.
14.	put — take out	I put my head and shoulders into the pinwheel. I take out the hides.
15.	do not lock — may start	If I do not lock the shipper, the pinwheel may start.
16.	may be killed	I may be killed.

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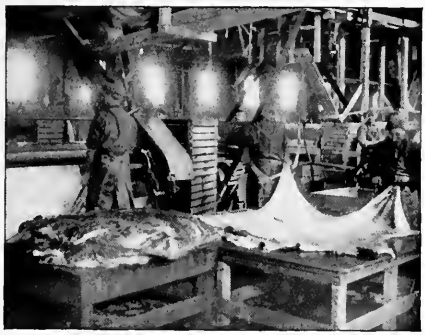
LESSON 3



FLESHING MACHINE

PADDLE WHEELS

FLESHING AND LIMING

1.	must take	We must take the pieces of flesh from the rawstock.
2.	soak—soften	When we soak the rawstock, we soften the flesh.
3.	truck	We truck the hides from the pinwheel to the fleshing machine.
4.	cut off	We cut off the flesh in a fleshing machine.
5.	truck	Now we truck part of the hides to the lime pits.
6.	look	Lime pits look like soaking vats.
7.	loosens	The lime liquor in the lime pit loosens the hair.
8.	truck	We also truck part of the hides to the paddle wheels.
9.	take off	Why do we take off the flesh from the hides?
10.	put	I put the hides in the vat of the paddle wheel.
11.	turns around	The paddle turns around in the lime liquor.
12.	loosens	The lime liquor in the paddle wheel loosens the hair.
13.	must wear	I must wear clean rubber gloves.
14.	must wash	I must wash my hands and gloves often.
15.	leave—burn	If I leave lime on my hands, it will burn them.
16.	must go—	I must go to our doctor at once if the lime burns me.
17.	makes	Handling wet hides makes the floor wet and slippery.
18.	am not careful	If I am not careful, I may slip and fall.

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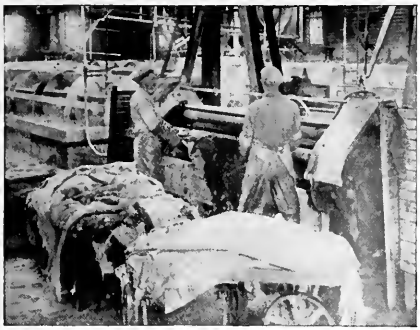
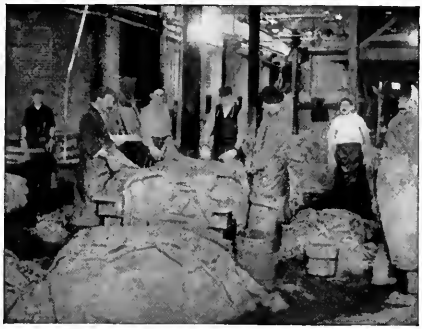
LESSON 4



UNHAIRING MACHINE



SORTING HIDES

UNHAIRING, SORTING AND TRIMMING

1.	pull	We pull the hides from the lime.
2.	truck	We truck the hides to the unhairing machines.
3.	must use	We must use two unhairing machines.
4.	pulls out	One pulls out the coarse hair.
5.	pulls out	The other pulls out the fine hair.
6.	look to see is left	We look carefully to see if any hair is left on the hide.
7.	must scrape	If any hair is left, we must scrape it off with a knife.
8.	make	We make different kinds of leather from hides.
9.	make	Hides which do not have grub holes, brands or scratches, make the best leather.
10.	look	I look at the hides carefully for grub holes, brands and scratches.
11.	put	I put each kind of leather into a different pile.
12.	call	I call this sorting.
13.	to go	Some parts of the hide are too thick to go through the splitting machine.
14.	trim	I trim them off while I sort the hides.
15.	is	The floor in the beamhouse is wet and slippery.
16.	be careful	I must be careful not to slip and fall.

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LESSON 6

DANGER! THE SHIPPER IS NOT LOCKED

A CAREFUL WORKMAN

TANNING

1. truck — We truck the hides from the beamhouse to the tannery.
2. to make—last — We tan the hides to make the leather last a long time.
3. was — Twenty-five years ago all hides were tanned with bark from trees.
4. soaked — They soaked the hides in water with bark from oak and hemlock trees (in it).
5. takes — Bark tanning takes about three weeks.
6. call — Sometimes we call bark tanning extract tanning.
7. put — We put the hides into vats for bark tanning.
8. put — We put splits into tanning wheels for bark tanning.
9. tan — We now tan many hides by chrome tanning.
10. takes — Chrome tanning takes only about three days.
11. put — I put the hides into the tanning wheel.
12. has — The tanning wheel has chrome liquor in it.
13. close — I close the door and pull the shipper.
14. turns — The tanning wheel turns.
15. throws — It throws the liquor over the hides.
16. is — Is there a lock for the shipper?
17. is — What is the lock for?

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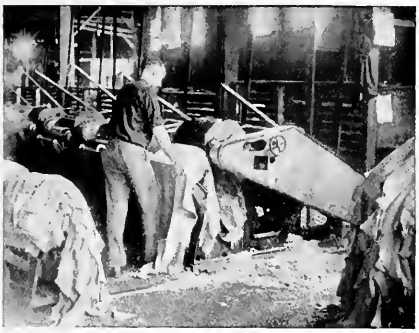
LESSON 7



SHAVING MACHINE

TRUCKING HIDES

SHAVING AND COLORING

1.	take	We take chrome hides from the tanning wheel.
2.	put	We put them in the shaving machine.
3.	shaves off	The shaving machine shaves off the rough parts of the hide.
4.	haul	The truckers haul the hides to the color department.
5.	put	I put the hides into fat-liquor.
6.	makes	The fat-liquor makes the leather soft.
7.	is	The fat-liquor is in a wheel like a tanning wheel.
8.	take	I take the leather from the fat-liquor wheel.
9.	haul	I haul the leather to the color wheel.
10.	is colored	Leather is colored black, brown and many other colors.
11.	is	The color wheel is like the fat-liquor wheel.
12.	take	When I take the leather from the wheel, I must be careful.
13.	is locked—may turn	If the shipper is not locked, the wheel may turn.
14.	may be caught	I may be caught and killed.
15.	slip	I must be careful not to slip in the color department.

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LESSON 8

BUFFING WHEEL

TACKING LEATHER

BUFFING AND TACKING

1. put	I put the leather on the buffing wheel.
2. is covered	The buffing wheel is covered with emery.
3. turns	The buffing wheel turns very fast.
4. is hard	The grain of the leather is hard.
5. takes off	The buffing wheel takes off the hard part of the grain.
6. stretch	The tackers stretch a wet side of leather on a tacking board.
7. drive	They drive tacking nails around the edges of the leather.
8. hold	The tacking nails hold the leather on the tacking board.
9. dry	Tacking stretches the leather so that it can dry out smooth.
10. are pulled	When the leather is dry, the tacking nails are pulled out.
11. call	We call this stripping.
12. have	Tacking nails have sharp points.
13. hurt	If we hurt our hands we must go to the doctor.

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LESSON 9

JACKING MACHINE

SPLITTING MACHINE (Back View Showing Grain and Split)

JACKING AND SPLITTING

1. take	I take bark-tanned leather to the curry shop.
2. put	I put the leather into a tub of water.
3. softens	The water softens the leather.
4. pull out	I pull the leather out.
5. throw over	I throw it over to the jacking machine.
6. makes	The jacking machine makes the leather flat for the splitting machine.
7. do not split	We do not split bark-tanned leather in the beamhouse.
8. skive — split	We must skive bark-tanned leather before we split it.
9. is skived	Leather is skived in a splitting machine.
10. skive — shave	When we skive the leather, we shave off the rough parts.
11. split	We split the leather in a splitting machine.
12. puts into	The feeder puts the leather into the splitting machine.
13. splits	The splitting machine splits the leather into two pieces of leather.
14. is called	One piece is called the "grain," the other is called the "split."
15. is	The grain is the hair side of the leather.
16. is	The split is the flesh side of the leather.
17. take	We take the "grain" and the "split" from the splitting machine.

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LESSON 10

SPRAYING LEATHER

RETANNING AND MILLING OR STUFFING

1.	tan	We tan bark-tanned leather again in the curry shop.
2.	call	We call this retanning.
3.	retan	We retan leather in a pinwheel.
4.	take	We take the leather from the pinwheel.
5.	hang—to dry	We hang up the leather on sticks to dry.
6.	take	We take down the leather when it is dry.
7.	is	The leather is very dry and hard.
8.	must dampen	We must dampen it to make it soft.
9.	dip	I dip the leather in a tub of water.
10.	hand	Then I hand the leather to my partner.
11.	sprays	My partner sprays the leather with a hose.
12.	spread	We spread the leather out in piles.
13.	pack	We pack down these piles with damp burlap for two or three days.
14.	put	Then we put the leather into pinwheels with grease.
15.	call	We call this milling or stuffing.
16.	is	Grease is good for many kinds of leather.
17.	watch — is	Watch your step. The floor is slippery.

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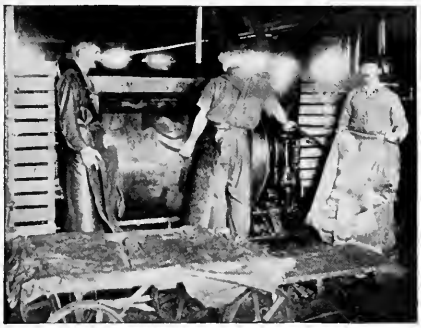
LESSON 11



PUTTING OUT MACHINE

HAND SETTING OUT

MACHINE AND HAND SETTING OUT

1.	truck	We truck the leather to the putting-out machine.
2.	put	I put the leather on the drum of the putting-out machine.
3.	pull	I pull the shipper.
4.	carries	The drum carries the leather to the rolls.
5.	is	There is too much grease on the leather.
6.	scrape off	The rolls scrape off some of the grease.
7.	truck	Then we truck the leather to the setters.
8.	lay	The setters lay the leather on tables.
9.	put	They put out the leather with slickers.
10.	put out to make	The setters put out the leather to make it flat and smooth.
11.	hang	The setters hang up the leather on sticks.
12.	is	We put the leather in piles when it is dry.
13.	is called	This is called packing down.

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LESSON 12

WHITENING MACHINE

BLACKING MACHINE

WHITENING AND BLACKING

1. truck — We truck the leather to the whitening machine.
2. shaves — The whitening machine shaves off the rough parts of the leather.
3. call — We sometimes call whitening cutting-over.
4. have — The rolls on the whitening machines have knives on them.
5. must keep — I must keep my fingers away from the knives.
6. trim — We trim the edges of the leather with a knife.
7. is — The leather is ready for coloring.
8. color — We color it in a blacking machine.
9. stand — I stand in front of the machine.
10. push — I push the leather to the rolls of the blacking machine.
11. spreads — The brush in the blacking machine spreads the color on the leather.
12. must be — I must be careful.
13. may crush — The rolls of the blacking machine may crush my fingers.
14. take — My partners take the leather from the other side of the blacking machine.
15. hang — Then they hang the leather on sticks to dry.

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LESSON 13

EMBOSSING MACHINE

GRAINING LEATHER

FINISHING GUN-METAL OR SPLITS

1. is dry	The leather is dry.
2. season	We are ready to season the leather.
3. put	We put seasoning liquor on the leather with a brush.
4. makes	Seasoning makes the leather look better.
5. take	We take the leather to the embossing machines.
6. press	We press the leather in an embossing machine.
7. make	Plain embossing plates make the leather smooth.
8. print	Other embossing plates print designs on the leather.
9. must be careful	I must be careful.
10. may crush	The embossing machine may crush my hands.
11. board grain	We board or grain some leather.
12. has	The grainer has an arm-board on his arm.
13. rubs	He rubs the leather with the arm-board.
14. makes	He makes the leather soft with the arm-board
15. cuts	The trimmer cuts off the rough edges.

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LESSON 14

SORTING AND BUNDLING

MEASURING MACHINE

SORTING, MEASURING, BUNDLING AND SHIPPING

1. is finished	The leather is finished.
2. call	We call it finished leather.
3. must sort	We must sort the leather.
4. puts	The sorter puts the leather on horses.
5. puts	He puts the heaviest and best leather on one horse.
6. puts	He puts the rest on different horses.
7. sell	We sell leather by the square foot.
8. put	I put the leather in the measuring machine.
9. tells	The measuring machine tells me how many square feet there are in a piece of leather.
10. tie	I tie the leather in bundles.
11. wrap	I wrap the bundles in paper.
12. is ready	The leather is ready to ship.
13. put	We put it in a freight car.
14. are made	Many things are made from leather.
15. know — are made	Do you know some things that are made from leather?

[Note. This lesson should also be used as Lesson 25.]

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LESSON 15

BUNDLES, CASE AND CASK OF SHEEPSKINS

SORTING AND COUNTING SHEEPSKINS

COUNTING AND SORTING

1. come	Sheepskins come in bundles, cases and casks.
2. unload count	After we unload the sheepskins we count the bundles.
3. count	Then we count the sheepskins in each bundle.
4. must be	There must be twelve sheepskins in a bundle.
5. are	There are twelve sheepskins in a dozen.
6. is — tell	If there is not a dozen in a bundle, we tell the foreman.
7. come	Sheepskins from the United States come in bundles.
8. come	Sheepskins from other countries come in cases and casks.
9. keep	We keep different kinds of sheep skins in separate lots.
10. says	The foreman says, "Keep the lots separate."
11. must stamp	I must stamp every sheepskin in a bundle.
12. take	Then the truckers take the bundles to the sorters.
13. sort — to make	The sorters sort the skins to make different kinds of leather.
14. makes	The fat from the skins makes the floors slippery.
15. must be careful	I must be careful not to fall.

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LESSON 16

FLESHING MACHINE

BUILDING PACKS FOR SHEEPSKIN PRESSES

FLESHING AND PRESSING

1.	truck	We truck the sheepskins from the sorters to the fleshing machines.
2.	truck	Sometimes we truck them to the presses first.
3.	is	There is flesh on the raw stock.
4.	put	I put the skin into the fleshing machine.
5.	are	There are sharp knives on the cylinder of the fleshing machine.
6.	cut off	The knives cut off the flesh.
7.	must keep	I must keep my hands from between the rolls.
8.	need	I need both my arms.
9.	have	The skins have grease in them.
10.	build	I build them into a pack for the press.
11.	put	I put the pack into the press.
12.	presses	The press presses out the grease.
13.	presses	The press presses each pack into a solid bundle.
14.	call	We call the bundles "cakes."
15.	must not slip	I must not slip on the greasy floor.

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LESSON 17

TRUCKING SHEEPSKINS

DANGER! THE SHIPPER IS NOT LOCKED!

MILLING

1.	truck	We truck the cakes from the presses to the tan cellar.
2.	put	I put the cakes of skins into a pinwheel.
3.	put	I put salt water into the pinwheel.
4.	pull	I pull the shipper.
5.	turns	The pinwheel turns.
6.	breaks	The pinwheel breaks up the cakes.
7.	softens washes	The pinwheel softens and washes the skins.
8.	are clean	The skins are clean and soft.
9.	pull	I pull back the shipper.
10.	must lock	I must lock the shipper.
11.	stops	The pinwheel stops.
12.	put	I put my head and shoulders into the pinwheel.
13.	take out	I take out the skins.
14.	pile	I pile them on a truck.
15.	did not lock	Joe did not lock the shipper.
16.	was killed	He was killed.

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LESSON 18

TANNING LIQUOR IS BOILING HOT

PUTTING LIQUOR INTO TANNING WHEEL

TANNING

1.	truck	I truck the skins to a tanning wheel.
2.	is	A tanning wheel is a pinwheel.
3.	says	The foreman says, "Weigh the skins."
4.	says	Sometimes the foreman says, "Count the skins."
5.	mix	I mix the tanning liquor.
6.	boil	I boil some of the liquor.
7.	says	The foreman says, "Do not burn yourself."
8.	has	Some tanning liquor has acid in it.
9.	am careful	I am careful not to spill acid on myself.
10.	put	I put the skins into the tanning wheel.
11.	pour	I pour tanning liquor into the tanning wheel.
12.	pull	I pull the shipper.
13.	turns	The wheel turns.
14.	tans	The tanning liquor tans the skins.
15.	take out	I take out the skins.
16.	must be careful	Why must I be careful when I take out the skins?

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LESSON 19

MACHINE PUTTING OUT

HAND PUTTING OUT

PUTTING OUT AND DRYING

1. makes — Tanning skins makes them wet and wrinkled.
2. must make — We must make the skins smooth.
3. call — We call this putting out.
4. take — We take some skins to the putting-out machine.
5. put — I put a skin between the rolls.
6. put — I put my foot on the treadle.
7. rolls — The putting-out machine rolls out the wrinkles.
8. am careful — I am careful not to get my hands between the rolls.
9. will crush — The rolls will crush my hands and arms.
10. take — We take some skins to the hand putters out.
11. lay — The hand putters out lay the leather on glass tables.
12. put — They put out the leather with slickers.
13. smooth — The slickers smooth out the wrinkles.
14. is — The leather is smooth.
15. hang — We hang the leather on hooks to dry.
16. are — The hooks are very sharp.
17. scratch — If I scratch my finger I must tell my foreman.

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LESSON 20

PADDLE WHEELS

COLORING

1.	color	We color most sheepskins.
2.	must sort	We must sort the skins before we color them.
3.	puts	The sorter puts the skins in different piles.
4.	must not mix	I must not mix the piles.
5.	tie	I tie the skins in bundles.
6.	take	We take the skins to the color cellar.
7.	put	We put the skins into the vat of the paddle wheel.
8.	is	There is water in the vat of the paddle wheel.
9.	turns	The paddle turns around.
10.	washes	The water washes the skins.
11.	truck	We truck the skins to the pinwheel.
12.	puts	The wheelman puts the skins into a pinwheel.
13.	pulls	He pulls the shipper.
14.	turns	The pinwheel turns.
15.	feeds	The foreman feeds the color into the wheel.
16.	goes	The color goes into the skins.
17.	stops	The wheelman stops the pinwheel.
18.	does	What does a careful wheelman do?

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LESSON 21

TACKING SHEEPSKINS

FAN USED IN DRYING ROOM

PUTTING OUT AND TACKING

1.	makes	Coloring skins makes them wet and wrinkled.
2.	must make	We must make the skins smooth.
3.	call	We call this putting out.
4.	is	What is putting out? (See Lesson 19.)
5.	must keep	We must keep the skins smooth.
6.	tack	The tackers tack the skins on boards.
7.	dry	The skins dry on the tacking boards.
8.	take	The strippers take the skins from the boards.
9.	hurt	Sometimes tackers hurt their hands.
10.	should go	They should go to the doctor.
11.	may get	They may get blood-poisoning from the skins.
12.	use	Some tanneries use fans in drying skins.
13.	must not put	I must not put my hands into the fan.

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LESSON 22

BUFFING WHEEL

BUFFING

1. finish	We finish sheepskin leather in many different ways.
2. buff	We buff the skins on a buffing machine.
3. does take	The fleshing machine does not take off all the flesh.
4. is rough	The buffing wheel is rough.
5. takes	It takes off the rough pieces of flesh.
6. must be damp	The skins must be damp.
7. put	We put the skins into damp sawdust.

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LESSON 23

BAKER STAKING MACHINE

SLOCUM STAKING MACHINE

KNEE STAKING

STAKING

1. must stake — We must stake all the skins.
2. put — I put the leather between the jaws of the staking machine.
3. makes — The staking machine makes the leather soft.
4. must keep — I must keep my fingers away from the jaws of the staking machine.
5. are staked — Some skins are staked by knee staking.
6. pull — The knee staker pulls the skins over a knee stake.
7. pulls — He pulls the skins with his hand and knee.

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LESSON 24

SEASONING AND HANGING

ROLLING JACK

SEASONING, ROLLING AND GLAZING

1.	season — to make — look	We season skins to make them look better.
2.	season	We season most skins by hand.
3.	dip	I dip the swab into the seasoning.
4.	rub	I rub the seasoning over the skin.
5.	hang	I hang the skin on a hook.
6.	season	I season some skins two or three times.
7.	roll	I roll the skins on a rolling-jack.
8.	put	I put the skin under the arm of the rolling-jack.
9.	rolls	The rolling-jack rolls the skin smooth.
10.	must not let catch	I must not let the roll catch my finger.
11.	put	I put the skin under the arm of the glazing-jack.
12.	makes — shine	The glazing-jack makes the leather shine.
13.	looks	The glazing-jack looks like a rolling-jack.

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